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Place Attachment, Perception of Place and Residents' Support for Tourism Development

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Abstract: Although place attachment is a critical factor shaping residents' attitudes toward tourism development, the relationship between the perceived qualities of a place (place image) and attachment to it has been under-explored within the context of tourism. This study proposes a model which integrates both place attachment and perception of place and examines their effect on the perceived tourism impacts and on residents' support for tourism development. Findings suggest that (a) place attachment precedes perception of place; (b) perception of place positively affects perceived impacts; (c) perception of impacts positively affects support for tourism development. The study extends prior work on tourism development by incorporating both emotional and physical evaluations of a place when modelling residents' attitudes toward tourism. The study also offers practical implications that are particularly important for the formation of sustainable tourism development programs.

Keywords: Place attachment, Perception of place, Support for tourism, Tourism impacts

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1. Introduction

Large scale development and urban regeneration projects trigger profound changes in the physical, built and social environment of a place, greatly influencing its physiognomy and character. When such changes are poorly planned and controlled, local people become alienated from their local surroundings (Green, 1999). This 'disruption' to place attachment often caused by gentrification (Brown and Perkins, 1992; Devine-Wright, 2009; Freeman, Cassola, and Cai, 2016), in turn, can lead to a sense of grief or even to a denial of change (Bonaiuto, Breakwell, and Cano, 1996; Chow and Healey, 2008). The development of tourism, in particular, brings forth a number of economic, sociocultural and environmental impacts on the host destination and its population (Prayag, Hosany, Nunkoo, and Alders, 2013; Stylidis and Terzidou, 2014). These changes, which vary in speed, often challenge the perceptions of full and part-time residents and potential newcomers who have different expectations about their community (Soini, Vaaralab, and Pouta, 2012). To maintain local distinctiveness and uniqueness and promote sustainability, tourism should be effectively planned and developed in consistence with the local community values and environment (Nunkoo and Gursoy, 2012).

The concept of 'place attachment', that is, a personal sentiment towards one's place or community (Goudy, 1990; Tuan, 1974), has been increasingly used in the urban planning and the environmental psychology literature as criterion for assessing potential impacts of development on local communities. Studies in social and environmental psychology, in particular, suggest that the way people perceive their physical environment and/or the established bonds with it greatly influence their behaviour and experiences (Carrus, Bonaiuto, and Bonnes, 2005; Devine-Wright and Howes, 2010; Larson, De Freitas and Hicks, 2013), including intention to migrate (Brower, 2003), pro-environmental behaviour (Clayton, 2003; Scannell and Gifford, 2010), and support/opposition for development projects (Devine-Wright and Howes, 2010; Twigger-Ross, Bonaiuto, and Breakwell, 2003). Previous research, for instance, reported that people who positively appraise a place and/or feel attached to it demonstrate also higher environmentally responsible behaviours (Scannell and Gifford, 2010; Stedman, 2002; Vaske and Kobrin, 2001).

Within the tourism context too, place/community attachment has been researched as a factor shaping residents' attitudes toward tourism development (Choi and Murray, 2010; Gursoy and

Rutherford, 2004; McGehee and Andereck, 2004). Draper, Woosnam and Norman (2009), for example, reported that more attached residents tend to be less positive toward tourism development. With few exemptions (Ramkissoon, Smith and Weiler, 2013; Woosnam, Aleshinloye, Strzelecka, and Erul, 2016), existing tourism research on place attachment, however, has mainly focused on its social component, pertaining to connections to family and friends, and/or the length of residency to the place (see Choi and Murray, 2010; Gursoy and Rutherford, 2004). Changes incurred by tourism on a given destination challenge apart from residents' emotional bond with a place, also their perception of its natural and built environment (perception of place). This, in turn, is known to affect their support for tourism development (Ramkissoon and Nunkoo, 2011). Pol (2002), for example, supports that the physical shape of the city also frames attitudes toward development. Additionally, researchers in other fields have well-established a link between physical evaluation of a place and emotional bond with it (e.g., Brehm, Eisenhauer, and Krannich, 2006; Hidalgo and Hernandez, 2001; Scannell and Gifford, 2010; Stedman, 2003), namely, the more favourable a place is perceived, the stronger the levels of attachment to it.

Despite evidence drawn from the environmental psychology literature, the relationship between the perceived qualities of a place and attachment to it has been underexplored within the context of tourism development. This inattention results in a lack of knowledge of the processes giving rise to place attachment, which, in turn, restrains from fully understanding how individuals evaluate change incurred by tourism development (i.e. tourism impacts, support for development) and which role perception of place plays in this process. It is generally accepted nowadays that understanding how hosts' support for tourism is formed is critical for the sustainable development of tourism (Gursoy and Rutherford, 2004; Vargas-Sanchez et al., 2009).

Considering the aforementioned gap in the tourism literature, this study aims to expand existing knowledge on place attachment, perception of place and residents' attitudes toward tourism by responding to the following questions: How does place attachment affect the way people perceive their environment/place, and vice versa, how does perception of place contribute to the development of emotional bonds with it? Lastly, how do both of these simultaneously affect residents' perception of tourism impacts and their subsequent support for tourism development? To achieve its aims, a path model will be developed investigating

the links between residents' perception of their place, place attachment, the perceived impacts of tourism and their support for tourism development. The proposed model was tested on residents in the city of Kavala in Greece, which was selected as the setting of this study for several reasons. First, Kavala is currently undergoing significant development that is expected to affect residents' perception of their city and their level of attachment to it. In particular, besides developing its religious and cruise tourism, the local authorities have also devised development plans including the conservation of the old town, a new marina, and a beach resort project (Kavala Municipality, 2013). These tourism development initiatives are likely to have a significant impact on the living and working conditions of the local residents. As such, the study will benefit the development process in Kavala by revealing residents' sentiments and attitudes towards tourism. Second, some recent changes in visa policy have led to a substantial increase in the number of tourists visiting Kavala, fact that gradually affects residents' quality of life. As a result, it is important for sustainable tourism planning to understand residents' perceptions of the impacts of tourism and their support for further development in Kavala.

The study extends prior work on tourism development (Choi and Murray, 2010; Gursoy and Rutherford, 2004) by incorporating both emotional and physical evaluations of a place when modelling residents' attitudes toward tourism. Integrating both aspects is especially useful for understanding residents' response to tourism, as tourism development causes a number of changes to both the physical and social setting of a tourist place. Additionally, this research has a number of practical implications that are particularly important for the formation of planning and development programs for tourism that will preserve and revitalize a place's physiognomy in line with local residents' will. The study, in particular, assists place managers and planners to develop tourism in a way that enhances residents' level of attachment to Kavala and ameliorates their perceptions of its setting. This in turn, is expected to lead to positive place image building, word-of-mouth communications and increased levels of support for tourism development.

2. Literature Review

2.1 Residents' Support for Tourism Development

Residents' attitudes toward tourism development are commonly examined within the Social Exchange Theory framework (SET). SET is concerned with the understanding of social process as based on the exchange of resources between individuals and groups. Ap (1992) was the first to adopt SET in tourism in an attempt to clarify and understand residents' response to tourism development. The theory postulates that residents (as individuals) are likely to participate in an exchange with the tourism industry as long as they gain or expect to gain more benefits than costs. Researchers thus assumed that the more positive the potential impacts of tourism are perceived to be, the more residents are willing to support tourism development (Gursoy et al., 2010; Stylidis and Terzidou, 2014). This relationship has been corroborated by a plethora of studies, providing evidence to support SET in tourism (e.g., Gursoy and Rutherford, 2004; Jurowski et al., 1997; Nunkoo and Ramkissoon, 2012). Nevertheless, SET has been recently criticized for heavily focusing on the financial exchanges (Ward and Berno, 2011; Woosnam and Norman, 2011).

2.1.1 Residents' perceptions of tourism impacts (Economic, Socio-Cultural, Environmental)

Understanding the impacts of tourism is a critical part of sustainable tourism development and management in order to ensure the optimal outcomes of tourism (Gunn and Var, 2002). It is widely accepted in the relevant literature that tourism generates economic, socio-cultural and environmental impacts (Mill and Morrison, 2009). First, tourism is a tool for economic regeneration of an area, given that it is perceived to increase investment and employment (Dyer, Gursoy, Sharma, and Carter, 2007; Lee, Li, and Kim 2007), improve the standard of living, increase state's revenues (Byrd, Bosley, and Dronberger 2009; Gursoy and Rutherford, 2004) and contribute to the development of infrastructure (Andriotis and Vaughan, 2003; Terzidou, Stylidis, and Szivas, 2008). At the same time, however, tourism is known to increase the prices of goods and/or land/houses (Bestard and Nadal, 2007; Cui and Ryan, 2010).

Second, the impact of tourism on the socio-cultural context can be both positive and negative. Tourism often enhances inter-cultural understanding (Gilbert and Clark, 1997; Kuvan and Akan, 2005), increases the opportunities for shopping and recreation at the destination (Byrd et al., 2009; McDowall and Choi, 2010), fosters emotional solidarity among residents and tourists (Woosnam and Norman, 2011), contributes to the preservation of local culture

(McDowall and Choi, 2010; McGehee and Andereck, 2004) and to the improvement of local services (Kuvan and Akan, 2005). On the other hand, it can negatively affect the local culture and/or services (Bestard and Nadal, 2007; Dyer et al., 2007; Ko and Stewart, 2002), and increase social problems such as crime, alcoholism and prostitution (Nunkoo and Ramkissoon, 2010). Finally, in terms of the environment, tourism is often linked to pollution, crowding, noise, and traffic congestion (Byrd et al., 2009; Dyer et al., 2007; Nunkoo and Ramkissoon, 2010; Terzidou et al., 2008). Especially large scale projects have been found to destroy the natural environment in vulnerable ecosystems (Andriotis, 2008). Overall, past research supports that the more favourably/positively the impacts of tourism are perceived by the local population, the higher their support for tourism development and reversely, the less favourable the impacts the less supportive for tourism development the host population will be (see Ko and Stewart, 2002; McGehee and Andereck, 2004; Nunkoo and Ramkissoon, 2010; Vargas-Sanchez, Plaza-Mejia, and Porras-Bueno, 2009). Jurowski et al. (1997), for example, found that the favourably perceived impacts of tourism are positively related to residents' support for its development. Based on SET and the preceding discussion, the current study hypothesizes that:

H1: A positive relationship exists between residents' perception of the impacts of tourism and their support for tourism development

2.2 Place Attachment

Place attachment is the result of people's cumulative experiences with both physical and social aspects of an environment that lead to emotional bonding with that place (Low and Altman, 1992; Tuan, 1974). The appearance of this subjective approach to places in the academic scholarship is usually associated with the work of Geographer Yi-Fu Tuan (1974, 1977), who points out that any conceptualization of a place should include the meanings and values that people ascribe to it. Numerous concepts have been used since then to describe people's relations to places including, among others, place attachment, sense of place, community attachment, and sense of community. Although each of them has a somewhat different meaning, the terms often overlap both conceptually and methodologically (Lewicka, 2010). According to Hidalgo and Hernandez (2001) there seems to be a recent consensus in the literature regarding the use of place attachment. Place attachment is commonly present in people's life (Lewicka, 2008; Williams and McIntyre, 2001) as it is antecedent to psychological balance (Rowles, 1990).

Community/place attachment has been investigated in several fields (i.e., sociology, psychology and marketing) including tourism. Although researchers agree that residents who feel emotionally attached to their community adopt different approaches when assessing the impacts of tourism than the less attached residents, the nature (positive/negative) of this relationship is not clear (see Gursoy, Jurowski, and Uysal, 2002; Gursoy and Rutherford, 2004; McCool and Martin, 1994; McGehee and Andereck, 2004). In line with a stream of researchers, residents' attachment to their community is negatively related to their perception of tourism impacts (Draper, Woosnm and Norman, 2009; Haralambopoulos and Pizam, 1996; Madrigal, 1993; Snaith and Haley, 1999). For example, studies conducted in Samos Island, Greece (Haralambopoulos and Pizam, 1996) and in York, U.K. (Snaith and Haley, 1999) found that the shorter the period of residency, the more positive the residents' perception of tourism impacts. A tenable explanation is that newcomers are not well-aware of the negative impacts of tourism. On the other hand, Jurowski, Uysal, and Williams (1997) and Gursoy and Rutherford (2004) reported that more attached residents tend to perceive the economic and social impacts of tourism in a more positive manner than the less attached ones. Finally, McCool and Martin (1994) and Choi and Murray (2010) found that strongly attached residents rated the benefits of tourism higher but at the same time they were more concerned about the costs than the less attached residents.

This inconsistency in the findings with regards to the relationship between place attachment and perception of tourism impacts can potentially be attributed to the different approaches adopted in its measurement. Studies, in particular, that measured attachment as length of residency found a negative association between attachment and perception of impacts (Draper et al., 2009; Haralambopoulos and Pizam, 1996; Snaith and Haley, 1999), whereas other studies that measured attachment as residents' social bonds with their place reported a positive relationship (Jurowski et al., 1997; Gursoy and Rutherford, 2004). By adopting a more holistic approach, Ramkissoon et al. (2013) conceptualised place attachment as comprising four dimensions: place dependence, place identity, place affect and social bonding, and found a positive link between attachment and place satisfaction. Beyond the tourism literature, place attachment has been reported to be two-dimensional, including a place identity dimension (Proshansky, Fabian and Kaminoff, 1983) and a place dependence dimension (Stokols and Shumaker, 1981). Place identity refers to the meaning a place has to an individual (Tsai, 2012), while place dependence indicates the importance of a place in

supporting a person's goals and planned activities (Stokols & Shumaker, 1981). In sum, the indicators used to measure place attachment in the tourism literature seem to influence the nature (positive/negative) of its relationship with residents' attitudes toward tourism development.

Additionally, past research has placed an emphasis on the social aspect of place attachment. This approach has been criticized by researchers, like Hidalgo and Hernandez (2001, p.275), on the grounds that 'we might be led to assume that place attachment is in reality attachment to the people who live in that place'. Brehm, Eisenhauer, and Krannich (2006) further argued that previous studies on place attachment have often neglected the attributes of a place that people become attached to. In contrast to place attachment, which is commonly approached as a stable psychological trait (Hidalgo and Hernández, 2001), people's perception of place is more dynamic and fluid, built upon the perceived attributes of that place (Govers, Go and Kumar, 2007). In line with Kemmis (1990), attachment to a specific place is embedded within the characteristics of this place. Some researchers, therefore, argue that the perceived qualities of a place (i.e., physical environment) should be further explored in relation to place attachment (Brehm et al., 2006; Stedman, 2003). This proposition is further corroborated by findings in the environmental psychology literature (see Casal et al., 2010; Mesch and Manor, 1998). Mesch and Manor (1998), for example, reported a positive relationship between place attachment and the evaluation of the environment as a good place to live. Similarly, Adeola (2000) compared two communities, a highly polluted and a less-polluted one, and found that people living in the polluted place perceived it as less attractive, were less proud of living there and demonstrated different attitudes and behaviours toward the environment. In the community satisfaction literature too, a positive relationship has been established between perception of physical environment and residential satisfaction (see Potter and Cantarero, 2006; Sirgy, Gao, and Young, 2008).

Drawing on tourism studies discussed above such as Jurowski et al. (1997), Gursoy and Rutherford (2004) and Choi and Murray (2010), place attachment is hypothesized here to be positively related to residents' perception of tourism impacts. Research in other fields too has verified the role of place attachment in predicting attitudes toward development plans (Lalli and Thomas, 1989; Pol, 2002; Vorkinn and Riese, 2001). Overall, the more positive the perception of the environment (perception of place), the more attached to the place the resident will be.

Despite the existence of strong evidence supporting the link between place attachment and perception of impacts, limited empirical research has examined the relationship between perception of place and perceived impacts (Ramkissoon and Nunkoo, 2011; Schroeder, 1996). Among the few studies available, Ramkissoon and Nunkoo (2011) examined a link between residents' place image, their perception of tourism impacts and support for its development. Their findings suggest that residents with more positive images of a place are more likely to perceive the impacts of tourism favourably. Schroeder (1996) also reported that residents with more favourable images of North Dakota displayed greater disposition towards state funding for tourism development and promotion (support for tourism) and were more likely to recommend the destination to others. Building on these studies, it is expected that the more favorable the residents' perception of place, the more positively they will perceive the impacts of tourism. Based on the preceding discussion, the following three hypotheses can be formulated:

H2: A positive relationship exists between residents' perception of their place and their level of attachment to it (place attachment)
H3: A positive relationship exists between residents' level of place attachment and their perception of the impacts of tourism on that place
H4: A positive relationship exists between residents' perception of their place and their perception of the impacts of tourism on that place

Although studies in a number of disciplines including social and environmental psychology have explored *H2*, the existence of a hierarchical relationship between the two constructs remains vague. In line with a stream of researchers, an evaluation of a place's physical features precedes the emotional bond with it (Stedman, 2002). For example, Fleury-Bahi, Félonneau, and Marchand (2009), and Hummon (1992) support that the physical environment can contribute to residents' emotional ties and attachment if perceived favourably. Geographer Lynch (1960) has also acknowledged the importance of an attractive urban environment in formulating positive socio-psychological influences on people. Similarly, Jackson (1994) argues that place attachment might stem 'from our response to features that are already there: either a beautiful natural setting or well-designed architecture' (p.151). Lastly, Kim and Kaplan (2004) found that residents with greater appreciation of local services and natural traits in their area feel closer to their community. Therefore, along with this line of

thought a) people first ascribe meaning to a place and then become attached to it (Kemmis, 1990; Shumaker and Taylor, 1983); and subsequently b) the more positive the evaluation of a place, the stronger the bond residents feel to it (place attachment).

On the contrary, other studies have reported that people with higher levels of place attachment appraise also in a more positive manner the physical qualities of the place they live in, and develop strong identity connections (e.g., Billig, 2006; Bonaiuto et al., 1996; Rollero and Piccoli, 2010). Bonaiuto et al. (1996), for example, examined the relationship between English students' attachment to their place and their perceptions of three polluted and three unpolluted beaches in the U.K. These researchers found that more attached students perceived all beaches as less polluted than the less attached ones. Urban studies also confirm that a person's bond to a particular place is positively related to his/her evaluation of the town's urban quality (Lalli, 1988). Drawing, therefore, on the growing number of studies that investigate the link between perception of place and place attachment, and taking also into account the often contradictory results reported in the past, two additional models (see Figure 1b and Figure 1c) will be developed in this study, whereby investigating the existence of a hierarchical relationship between the two constructs in the context of residents' attitudes toward tourism. The first alternative model (M_1), in particular, will test the sequence 'perception of place – place attachment – perceived impacts – support for tourism' and the second alternative model (M_2) will examine the sequence 'place attachment – perception of place – perceived impacts – support for tourism'.

In sum, this study seeks to identify the potential role perception of place plays in the relationship between place attachment and residents' attitudes toward tourism development (Figure 1a). The study contributes to understanding how residents' support for tourism development is formed, especially as the factors examined here emphasize on both the emotional and physical evaluation of a place. It also assists in formulating plans that a) respect the character of the place and avoid disrupting place attachment, and b) are supported by the majority of the host population. Both of these are fundamental for the sustainable development of tourism (Gursoy et al., 2010; Murphy, 1985).

[Figure 1a, Figure 1b and Figure 1c About Here]

3. Research Design

3.1 Study Site

Kavala (population 55,325), Greece was the site of this study. Kavala served as the starting point of Christianity in Europe and is the place where the first European woman was ever baptised. The local economy is based mainly on the extraction and export of natural resources (e.g., oil, fishing, marble, agriculture), and more recently on a growing tourism industry. Tourist nights reached 242,325 in 2010, with the main markets being UK, Germany and Bulgaria (Hellenic Statistical Authority, 2012). The 51 hotels of the city offer 3,159 hotel beds and the average duration of tourists' stay is eight days. The hotel occupancy stood to 38% in 2011 (Hellenic Statistical Authority, 2012). In the last years, the local council has attempted to develop the religious and cruise tourism of Kavala, as the city is part of the international religious tourism route tracking the footsteps of St. Paul and concurrently provides adequate infrastructure to accommodate large cruise ships. The local council's efforts to entice cruise companies proved fruitful, as evidenced by 12 cruise ships with 4,320 tourists that disembarked in Kavala in 2012. The city of Kavala has potentials for further tourism development as it offers a variety of tourism products including leisure, heritage, religious, educational and adventurous tourism: seaside resorts, cultural monuments and festivals, world heritage and religious sites, thermal and mud baths, and natural areas.

3.2 Sample and Survey Design

The target population of this study was the permanent residents of Kavala (aged 18 years and over). Given that a sampling frame was not available, multi-stage cluster sampling was used as it enables researchers to recruit residents from different areas, thus providing a 'balanced' composition of respondents (Boley, Maruyama and Woosnam, 2015). More precisely, the process commenced with clustering addresses by postcodes (five clusters), based on the post office list. In the second stage, a list including the street names of the five main districts was constructed, and then 10 street names were randomly selected from each district. Then, households were randomly approached and invited to participate in the study (see Woosnam and Norman 2010). The data were collected with the use of self-administered questionnaires that were hand-delivered by the researcher to 500 houses. A structured self-administered questionnaire with the researcher being available on spot was preferred as it leads to higher response rates (Czaja and Blair, 2005). In total, 481 valid questionnaires were collected.

Similar to past research (McGehee and Andereck, 2004), a satisfactory response rate was achieved (77 percent).

3.3 Measurement of the Constructs

The questionnaire contained three sections. The first section aimed to examine residents' perceptions of Kavala and their level of attachment to the city. To capture the multi-dimensional nature of place, three dimensions comprising ten items in total were used. The dimensions/items were drawn from the place image and community satisfaction literature (e.g., Baloglu and McCleary, 1999; Beerli and Martin, 2004; Echtner and Ritchie, 2003; Ko and Stewart, 2002; McCrea, Stimson, and Western, 2005). Attention was given to (a) "universal attributes" (i.e., scenery, safety) excluding attributes which may not be suitable to the context of Kavala, (b) attributes common across the place image literature (e.g., scenery, friendly residents), and (c) functional attributes, as these are more controllable and manageable by tourism planners (Green, 1999). The first dimension, Physical Appearance, comprises four items (scenery, climate, architecture, historic sites); the second dimension called Social Environment consists of three items including safety, friendliness of the locals, and cleanliness; the last dimension termed Entertainment Opportunities contains three items (i.e., shopping, restaurants, nightlife). A five-point Likert scale was used with values ranging from strongly disagree (1) to strongly agree (5). An inspection of the reliability of the three aforementioned dimensions of residents' perception of place revealed that in all cases the Cronbach alpha values exceeded the recommended benchmark of 0.7 (Hair et al., 2014). *Residents' place attachment* was measured by three items based on Goudy (1990), McCool and Martin (1994), Matarrita-Cascante et al. (2010) and Gursoy and his colleagues (Gursoy et al., 2002; Gursoy and Rutherford, 2004). This measurement is in line with the notion of place attachment as reflecting an individual's rootedness and sense of belonging, which according to Kasarda and Janowitz (1974) has three dimensions: sense of place (item 1: feel like home), interest in place (item 2: interested in what's going on), and sentiment toward place (item 3: feel sorry to leave).

The second section aimed to capture residents' perception of the various impacts of tourism. The tourism impact latent construct comprised of an economic, a socio-cultural and an environmental indicator variable. The *Perceived Economic Impacts* subscale contained five items (i.e., employment opportunities, standard of living) based on studies such as Bestard

and Nadal (2007), Lee et al. (2007), McDowall and Choi (2010), and Nunkoo and Ramkissoon (2010). Following Andriotis and Vaughan (2003), Cui and Ryan (2010), Dyer et al. (2007), and Terzidou et al. (2008) the *Perceived Socio-Cultural Impacts* subscale included six items such as quality of public services, community spirit, and level of crime. The *Perceived Environmental Impacts* were evaluated by four items (pollution, traffic, noise, crowding) drawn from studies such as Bestard and Nadal (2007), Byrd et al. (2009), and Gu and Ryan (2008). Neutral statements were used in the evaluation of all items as they are expected to lead to less biased answers (Ap and Crompton, 1998). Respondents, in particular, were asked to indicate the extent to which tourism has a positive or negative impact on each of the aforementioned aspects (ranging from 1 'negative' to 5 'positive'). Finally, *Support for Tourism Development* was evaluated by three items (general support for tourism, public funding, increase in the number of tourists) drawn from studies conducted by McGehee and Andereck (2004) and Nepal (2008). The responses were measured on a Likert scale ranging from strongly disagree (1) to strongly agree (5). A group of six tourism experts and academics confirmed the representativeness and suitability of the items included in the questionnaire. At the final stage before data collection a pilot test was conducted (with 65 residents of Kavala), which ensured the suitability of the research instrument.

4. Findings

4.1 Sample Profile and Descriptive Statistics

Male (n= 225, 47%) and female (n=254, 53%) were roughly equally represented in the sample (Table 1). Residents aged over 65 years were the largest group in the sample, followed by the age group of 25-34. Most of the participants reported that they have been living in Kavala for over 20 years (68%, n=322). In terms of income, most respondents reported earning less than 20,000€.

[Table 1 About Here]

Overall, local residents tend to positively (mean scores exceeding 3) evaluate the economic and socio-cultural impacts of tourism in Kavala (Table 2), whereas they perceive tourism to have a negative effect (mean score lower than 3) on the environment. Respondents appear generally supportive of tourism development (overall mean score of 3.92), had a somewhat positive perception of Kavala (M=3.46) and expressed some level of attachment to the city (M = 3.47).

4.2 Confirmatory Factor Analysis

Following the two-step model analysis, prior to testing the structural model, a Confirmatory Factor Analysis (CFA) was employed to estimate the fit of the measurement model (Anderson and Gerbing, 1988). CFA procedures are commonly used for testing the validity (convergent, discriminant) and reliability (construct) of the indicator variables, providing validation of the scales used for the measurement of specific constructs (Steenkamp and van Trijp, 1991). The programme used was Amos v.20.

The measurement model demonstrated a good fit to the data: $\chi^2_{(143)} = 320.2$ ($p < 0.001$), the ratio of χ^2 to the degrees of freedom (CMIN/DF) is 2.24 (Byrne, 2001), both Goodness of Fit Index (GFI = 0.930) and Comparative Fit Index (CFI = 0.950) suggest a good fit (Kline, 2010), while the value of Root Mean Square of Approximation (RMSEA = 0.051) is under the threshold proposed by Hair, Black, Babin, and Anderson (2014) for a good-fitting model. In total, the model-of-fit indices lend credence to the measurement model. Nevertheless, one item (environmental impacts) had a factor loading below the minimum criterion of 0.40 and accordingly was eliminated from further analysis. A tenable explanation is that Kavala is an

urban setting in the first stages of Butler's lifecycle model and as such the impacts of tourism on the environment are not so apparent (Dyer et al., 2007; Vargas-Sanchez et al., 2009). The revised measurement model was then re-estimated and results demonstrated a good fit to the data: $\chi^2_{(126)}$= 280.0 ($p < 0.001$), CMIN/DF = 2.22, GFI = 0.934, CFI = 0.956, and RMSEA = 0.050. With the measurement model being acceptable, each construct was evaluated next.

A necessary condition for convergent validity is that each construct's indicators should share a high proportion of common variance, indicated by the magnitude and significance of the paths between a latent variable and its indicators (Hair et al., 2014). In the measurement model (Table 2) all standardised loadings were over the proposed minimum level of 0.5 and significant (t *value* > 2.576, p *value* < .05). In sum, all indicators were significantly and strongly related to specified constructs, verifying posited relationships.

[Table 2 About Here]

Additionally, all the construct reliability values were higher than 0.70, indicating that in each case the items consistently represent the same latent construct (Kline, 2010). Another tool used to assess convergent validity is the average variance extracted (AVE), which reflects 'the amount of variance that is captured by the construct in relation to the amount of variance due to measurement error' (Fornell and Larcker, 1981, p.45). All the AVE scores, apart from one (perception of place, AVE value 0.49), were higher than 0.5, which is the threshold that Fornell and Larcker (1981) recommend for a construct. Finally, *discriminant validity* was confirmed given that the AVE estimates for each construct were greater than the inter-construct squared correlation estimates (see Table 3) (Hair et al., 2014).

[Table 3 About Here]

4.3 Structural model

The fit of the baseline structural model (M_t) was: $\chi^2_{(128)}$ = 290.34 ($p < .000$). Although the χ^2 is significant, its ratio to the degrees of freedom (CMIN/DF) is 2.27, which is considered acceptable (Bollen, 1989). The GFI (0.932) and CFI (0.953) values signify a good fitting model, and RMSEA is equal to 0.051, which is below the cut-off point of 0.08 (Hair et al., 2014). In total, all fit indices are within the accepted ranges and the total variance explained in

the baseline model is 67%; it can thus be concluded that the hypothesised structural model fits the data quite well. Table 4 summarises the findings of hypotheses testing. The critical values together with the estimated magnitude of the paths were used to support or reject the four hypotheses of the current study. An inspection of the standardised path estimates revealed that, apart from one case (link between place attachment and perception of impacts), all path estimates were significant and in the expected direction. More precisely, perception of the impacts of tourism had a strong positive effect (path estimate = *0.82*) on support for tourism; the path estimate between perception of place and place attachment was also positive (*0.44*); place attachment had a weak but non-significant positive effect on the impacts of tourism (path estimate = *.09*); and perception of place had a strong positive effect on perception of the impacts of tourism (path estimate = *0.79*). In total, three out of four hypotheses included in the baseline model were supported, and their implications for tourism theory and practice are discussed in detail in the next section.

[Insert Table 4 Here]

5. Discussion

The aim of this study was to develop a model that integrates both perception of place and attachment as antecedents to residents' attitudes toward tourism. Overall, the findings reveal that (a) there is a positive correlation between perception of place and place attachment; (b) both place attachment and perception of place positively affect residents' perception of tourism impacts; and (c) perception of impacts affects support for tourism development. In contrast to previous studies that have focused on place attachment, the model developed here elaborated also on the evaluation of the place as a key factor shaping residents' responses to tourism. An examination of the joint effect residents' perceptual evaluation of their place and their level of bond to it have on their perception of tourism impacts contributes to understanding how residents support for tourism is formulated. Residents, for instance, who hold more positive perceptions of their place and/or feel attached to it, will support further tourism development. Such an understanding also equips place planners and marketers with empirical knowledge pertaining to tourism development projects that will enhance residents' wellbeing in the community.

Residents' perception of the impacts of tourism was found to be positively related to their support for tourism development (H1). This is largely confirmatory of earlier research that also reported a positive link between perception of impacts and support for tourism development (e.g., Jurowski et al., 1997; Ramkissoon and Nunkoo, 2011; Stylidis and Terzidou, 2014; Yoon, Gursoy, and Chen, 2001). The finding, which reinforces the proposition of SET, suggests that residents who perceive the economic and socio-cultural impacts of tourism more positively, tend to agree more fervently with further tourism development, thereby validating the role of tourism as a stimulator of the local economy. Tourism, in addition, is perceived to enhance the social and cultural aspects of life in Kavala as it broadens residents' perspective and understanding of other cultures and increases the number of cultural events in their community. On the other hand, the environmental impacts of tourism were found to be of limited importance to Kavala residents, a finding that contradicts Jurowski et al. (1997) study results. This difference can be attributed to the context of the two studies, that is, Jurowski et al. (1997) explored nature based tourism in a rural area, while this study focused on general tourism in a developing urban destination. Issues of traffic and congestion are often less salient to those living in an urban setting. Moreover, as this research was conducted during a period of economic crisis, this may have

accentuated the importance of economic and socio-cultural impacts over the environmental consideration (Nunkoo and Ramkissoon, 2012; Stylidis and Terzidou, 2014; Vargas-Sanchez et al., 2009). Overall, residents' responses indicate that if the impacts of tourism are retained at this level, residents will continue to endorse tourism development.

Hypothesis 2, which examined a positive correlation between place attachment and perception of place, was also substantiated. The study thus confirmed the significant role the environment/place plays in formulating residents' level of attachment to their place and vice versa, emotional bond positively affects the way a place is perceived by its local residents. This is in line with Matarrita-Cascante et al.'s (2010) research findings that the natural landscape-related factors are positively linked to community attachment. It also corroborates Brehm et al. (2006) and Marcouyeux and Fleury-Bahi (2011) studies, which reported that the higher people evaluate the characteristics of the physical environment, the higher their level of attachment to the place. Therefore, individuals develop bonds to a place not only because of the close ties with people who live there, but also due to a place's physical assets such as its natural environment and climate (Lewicka, 2011). As such, studies in tourism should jointly examine perception of place along with place attachment, to better explain residents' attitudes toward planned development projects.

The findings, however, did not confirm Hypothesis 3, which proposed a positive relationship between place attachment and residents' perception of tourism impacts. More precisely, although place attachment has a positive effect on residents' perception of tourism impacts, this relationship was not found to be statistically significant. This is partially in line with previous tourism research, which reported that attached residents are more likely to evaluate the impacts of tourism more positively (e.g., Gursoy et al., 2002; McCool and Martin, 1994). On the other hand, it contradicts other studies that have reported a negative relationship between place attachment and perceived tourism impacts (e.g., Haralambopoulos and Pizam, 1996). Stedman (2002), for instance, found that higher levels of place attachment were associated with negative attitudes and increased willingness to engage in place-protective behaviours. Similarly, Vorkinn and Riese (2001) reported that greater place attachment was related to negative attitudes toward a proposed hydropower project in Norway. The insignificant role place attachment appears to play in this study can be attributed to the simultaneous examination of perception of place as potential antecedent to residents' attitudes

toward tourism. Namely, although place attachment has been reported elsewhere to be a critical factor shaping residents' response to tourism, its significance appears to be overshadowed in this study by residents' perception of place. Perception of place, in particular, is considered a more dynamic concept (Gallarza, Saura and Garcia, 2002), greatly affected by the changes incurred in the natural and built environment of a place. Especially tourism is a sector that can greatly affect the physiognomy and character of a place, due to its economic, socio-cultural and environmental impacts, as numerous studies have shown in the past (Byrd et al., 2009; Cui and Ryan, 2011; Dyer et al., 2007; Nunkoo and Ramkissoon, 2010).

Lastly, perception of place was found to have a positive effect on residents' perception of tourism impacts (H4). This result corroborates Ramkissoon and Nunkoo (2011) study that also reported a positive link between place image and perceived tourism impacts. The findings here indicate that a more positive perception of place leads to more favourable perceptions of the economic and sociocultural impacts of tourism, whereas Ramkissoon and Nunkoo (2011) have examined perceived impacts at a generic level (as "overall tourism impacts"). Perception of place appears therefore to be the "lens" through which residents evaluate the impacts of tourism. For example, in the case of Kavala, which is in the initial stages of Butler's TALC, the environmental impacts of tourism seem to be less evident (Butler, 1980; Dyer et al., 2007).

To further investigate the relationship between perception of place and place attachment, two alternative models (M_1 and M_2) were also examined. The first alternative model (M_1), which examined whether perception of place precedes attachment, was validated (see Table 5). The results indicate a mediocre fit of the model with $\chi^2_{(129)} = 422.2$ ($p < 0.001$), CMIN/DF = 3.27, CFI = .92, GFI = .91, RMSEA = .069, and total variance explained = 0.62.

[Insert Table 5 Here]

The second alternative model that examined whether people who have stronger bonds to a place tend to have more favourable perceptions of it was also substantiated (see Table 6). All model fit indices suggest a good model fit: $\chi^2_{(129)} = 292.2$, CMIN/DF = 2.26, CFI = .95, GFI = .93, RMSEA = .051, and total variance explained = 0.67 . Thus, the second alternative model

was a good fit for the empirical data.

[Table 6 About Here]

Sequential chi-square difference tests (SCDTs) were conducted post hoc to assess the fit of the three competing models (Table 7). The results suggest that a significant difference exists between the theoretical (M_t) and the first alternative ($M_{1)}$ model ($\Delta\chi^2$ = 131.86, df = 1, p < .001), namely the theoretical model had a lower chi-square value. When compared to the theoretical model, the second alternative model (M_2) had a lower chi-square value (Table 7), and the difference was statistically significant ($\Delta\chi^2$ = 1.86, df = 1, p > .10). Therefore, the second alternative model (M_2) was selected as being more parsimonious than the theoretical one (Figure 2). It seems that in the case of Kavala, residents who hold stronger ties with the place develop also more favourable perception of the city. This finding can be explained by the small and community-focused environment of Kavala and the collectivist culture of Greece. It is also in line with past research, which also reported that residents with higher levels of attachment tend to perceive their place in a more positive manner (Billig, 2006; Rollero and Piccoli, 2010). High levels of place attachment can also favour positive perceptions in terms of scenery and climate (Rollero and Piccoli, 2010).

[Table 7 About Here]

[Figure 2 About Here]

The major contribution of this study to tourism theory is that it extends prior work on tourism development by incorporating both emotional and physical evaluations of a place when modelling residents' attitudes toward tourism. Past research has produced mixed results with regards to the role of place attachment in formulating residents' support for tourism. The findings here suggest that residents' support for tourism and their perception of tourism impacts are built upon their perception of the place, which, in turn, is based on the rather stable emotional bonds residents have developed towards their environment. Therefore, what seems to be critical in the above mentioned relationships is the way the development is perceived (by local residents) in relation to the context of the place, that is, if the proposed change is perceived to enhance or disrupt the character of the locality (Carrus et al., 2005;

Twigger-Ross et al., 2003). For example, a negative relationship between perception of place and attitude toward a development project (mediated by perception of place) appears to suggest that the proposed project is perceived by residents as disrupting their place attachment. Such conflicts commonly occur when places that are considered, for instance, to be natural are impacted by industrial development projects (Devine-Wright and Howes, 2010). For example, Devine-Wright and Howes' (2010) study in two coastal towns (an attractive and a less attractive one) in Wales found that residents living in the attractive town demonstrated feelings of frustration and an overall negativity toward the proposed development plan (construction of two hundred wind turbines), in contrast to residents of the less attractive town, who were supportive of the planned project.

However, one can argue that not all development projects might disrupt residents' perception of place and/or their level of place attachment. Findings indicate that residents understand the need to modify their surroundings (Wiesenfeld and Giuliani, 2002) and are usually well aware of the possibilities that tourism development offers to improve their quality of life (McGehee and Andereck, 2004; Stylidis and Terzidou, 2014). This study, for example, reported a positive association between perception of place and the impacts of tourism. Furthermore, the positive evaluation of tourism impacts and the expressed level of support by Kavala residents signify that most residents have a pro-tourism approach, as tourism at the current level and form contributes to the community's well-being both economically, culturally and socially. Therefore, the development of tourism at this stage in Kavala seems to be compatible with the character of the city. When tourism develops in manner that is compatible to the character of a place it assists in highlighting the place's distinctiveness. This successively contributes to enhancing residents' civic pride, sense of belonging, level of attachment and identity (Carrus et al., 2005; William, 2007). As such, the way change in a place is interpreted by its local residents is a decisive factor regarding the nature of the relationship between place attachment, perception of place and acceptance of change (support for development). The more an individual feels connected to a specific place, the more he/she will express positive attitudes toward any project that will improve the character or physiognomy of that place (see also Twigger-Ross et al., 2003). In sum, the study bridges the gap in literature and practice by exploring the joint effect of perception of place and place attachment on community responses to tourism within the tourism development context. The study also sheds light in the discussion regarding the hierarchical relationship between place attachment and perception of

place. As the findings suggest, place attachment precedes perception of place; both of these are critical for the formation and continuation of a community (Warren, 1987).

6. Managerial Implications

This study also provides a number of practical implications for tourism development. First, it helps local authorities to design behavioural change campaigns and education programs that will enhance residents' attachment to a place. Further cultivating attachment is significant as it motivates individuals to work in order to improve their place. Past research, for example, has found that attached residents seek to actively participate in the decision making for community development (Matarrita-Cascante et al., 2006). Studies have also reported that attached residents who oppose development projects usually 'stay and fight the threat', whereas less attached residents are 'thinking to leave' from the place (see Twigger and Breakwell, 1994). To enhance residents' level of attachment tourism practitioners could emphasize, for example, the 'green' dimension of their place (Scannell and Gifford, 2010). As such even new residents can quickly develop a strong sense of attachment based on the physical environment. Second, the study findings highlight the importance of protecting the uniqueness and appeal of a place as the natural and built landscape represents a critical factor in defining a place's character (Matarrita-Cascante et al., 2010). It is these elements that have become so at risk due to developmental changes (Brehm 2007), and have the potential to negatively impact support for tourism. Especially, significant effort should be made to protect and promote place characteristics that shape residents' attitudes toward tourism. On the contrary, unplanned development in places like Kavala may degrade the place attributes that residents are attracted by and attached to (Brehm et al., 2004). This finding is particularly useful for places like Kavala, which are characterized by scenic beauty and offer natural amenities.

Another notable finding of this study is that perception of place is positively related to residents' attitudes toward tourism. This finding indicates that tourism development in Kavala - at the current level and pace - is compatible to the character of the city, and beneficial to its local population. This, in turn, leads to an increase in residents' support for tourism development. Implementing a monitoring program that will allow frequent assessment of residents' perception of place, attachment and attitudes toward tourism will facilitate the development of sustainable tourism plans. Finally, internal marketing campaigns can be used to enhance residents' awareness regarding the economic and socio-cultural benefits they receive from tourism, as both of them were reported to be significant determinants of their support for tourism development. In sum, this research sheds some light on what is valued by

the local residents of a place, which is critical to the planning and development of tourism.

Several weaknesses of this study should be addressed in future research. First, the proposed model mainly focused on perception of place and attachment, excluding other factors that might have explained residents' support for tourism. Factors such as sense of place or emotional solidarity, for example, should be considered in the future as potential determinants of residents' support for tourism (Woosnam et al., 2016). Second, the slightly lower AVE value reported in the case of the perception of place construct may affect the generalizability of the results to other destinations. Additional items such as psychological attributes (e.g., reputation and fame), as well as affective attributes (e.g., relaxing, pleasant) should, therefore, be incorporated in its measurement to capture potential dimensions of this construct (Brehm, 2007). Similarly, studies in the future should approach place attachment as a multidimensional construct and incorporate additional elements on its measurement. For example, as it has already been discussed in the literature, place attachment could encompass a place identity and a place dependence dimension. Fourth, further research should be conducted during the peak and off-peak seasons, as residents may respond differently to tourism development during various time frames (peak and off peak). Future research should also seek to further establish the exact relationship between perception of place and place attachment within the tourism development context. Finally, it will be interesting to examine the model's validity in other residential environments with a variety of characteristics (i.e., urban, rural). Residents of larger cities like London, for example, may display different levels of attachment, perception of place and subsequent attitudes toward tourism development than the residents of smaller towns like Kavala.

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Table 1. Sample profile

Demographic	Sample (n=481)	
Gender	Male	47%
	Female	53%
Age group	18-24	12.1%
	25-34	18.5%
	35-44	17.9%
	45-54	16.4%
	55-64	13.4%
	65 and above	21.4%
Length of residency (years)	1-9	15%
	10-19	17%
	20 and more	68%
Annual income (€)	Less than 9,999	18%
	10,000-19,999	35.4%
	20,000-29,999	23.4%
	30,000-39,999	12.6%
	40,000 and more	10.6%

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Table 2. Confirmatory factor analysis

Constructs, Indicators and Mean Scores	Stand. Loadings	Critical Ratio	Construct Reliability	AVE
Place Attachment (3.47)			**.80**	**.58**
Feel like home (3.55)	.810	18.660		
Interested in what's going on (3.56)	.714	13.903		
Feel sorry to leave (3.31)	.754	14.393		
Perception of Place (3.42)			**.74**	**.49**
Physical Appearance (3.85)	.693	10.054		
Social Environment (3.46)	.765	10.141		
Entertainment (2.96)	.619	7.459		
Impacts of Tourism (3.35)			**.76**	**.61**
Economic (3.40)	.787	18.243		
Socio-cultural (3.31)	.770	17.803		
Support for Tourism (3.92)			**.93**	**.81**
Increase in tourists' number (3.83)	.881	24.170		
Public funding for tourism (3.91)	.913	25.593		
Further tourism development (4.04)	.909	25.426		

Model fit: $\chi^2_{(126)} = 280.0$*, CMIN/DF = 2.22, GFI = 0.934, CFI = 0.956, RMSEA = 0.050*

Table 3. Correlation matrix

Constructs	Perception of Place	Place Attachment	Impacts of Tourism	Support for tourism
Perception of Place	**0.49**[a]			
Place Attachment	0.20[b]	**0.58**		
Impacts of Tourism	0.47	0.06	**0.61**	
Support for tourism	0.47	0.06	0.60	**0.81**

a Average variance extracted. b Inter-construct squared correlations.

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Table 4. The structural baseline model

H	Construct		Construct	Standardised Estimate	t-value	*p*
H1	Support for Tourism	<-	Impacts of Tourism	.82	14.514	***
H2	Perception of Place	<->	Place Attachment	.44	6.823	***
H3	Impacts of Tourism	<-	Place Attachment	.09	1.305	.192
H4	Impacts of Tourism	<-	Perception of Place	.79	10.586	***

Model fit: $\chi^2_{(128)}$ *= 290.34, CMIN/DF=2.27, CFI=.95, GFI=.93, RMSEA=.051, *** < .001*

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Table 5. The first alternative model (M_1)

Construct		Construct	Standardised Estimate	t-value	*p*
Place Attachment	<-	Perception of Place	.49	5.490	***
Impacts of Tourism	<-	Place Attachment	.31	5.392	***
Support for Tourism	<-	Impacts of Tourism	.79	14.016	***

*Model fit: $\chi^2_{(129)}$ = 422.2, CMIN/DF=3.27, CFI=.92, GFI=.91, RMSEA=.069, *** < .001*

Table 6. The second alternative model (M_2)

Construct		Construct	Standardised Estimate	t-value	*p*
Perception of Place	<-	Place Attachment	.41	6.072	***
Impacts of Tourism	<-	Perception of Place	.74	8.557	***
Support for Tourism	<-	Impacts of Tourism	.82	14.523	***

Model fit: $\chi^2_{(129)}$ *= 292.2, CMIN/DF=2.26, CFI=.95, GFI=.93, RMSEA=.051* *** < .001*

Table 7. Comparison of the three models tested

Models	χ2	df	Δχ2	Δdf	*p*	CMIN/DF	CFI	GFI	RMSEA
Theoretical	290.34	128	-	-	-	2.27	.95	.93	.051
Model 1 (M1)	422.2	129	131.86	1	<.001	3.27	.92	.91	.069
Model 2 (M2)	292.2	129	1.86	1	> .10	2.26	.95	.93	.051

Figure 1a. The proposed baseline model (M_t)

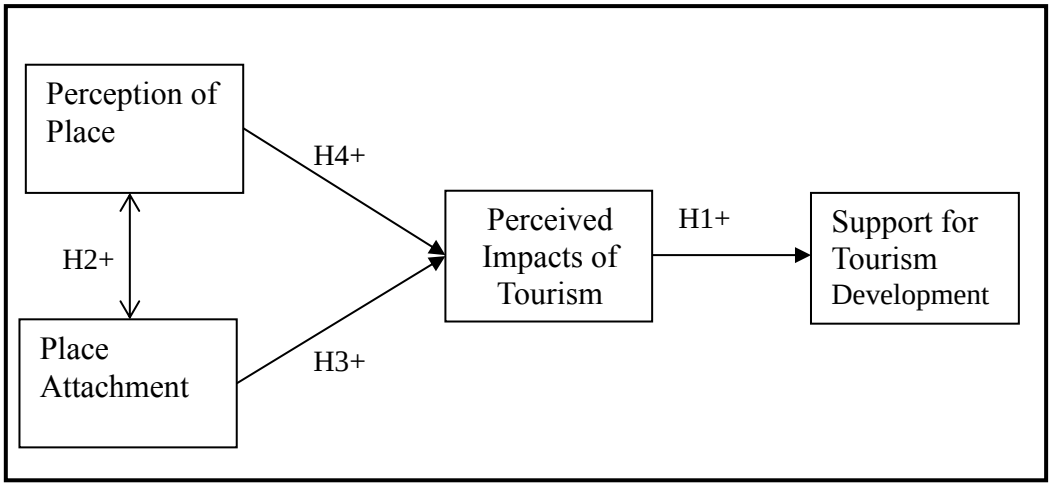


Figure 1b. The first alternative model (M_1)

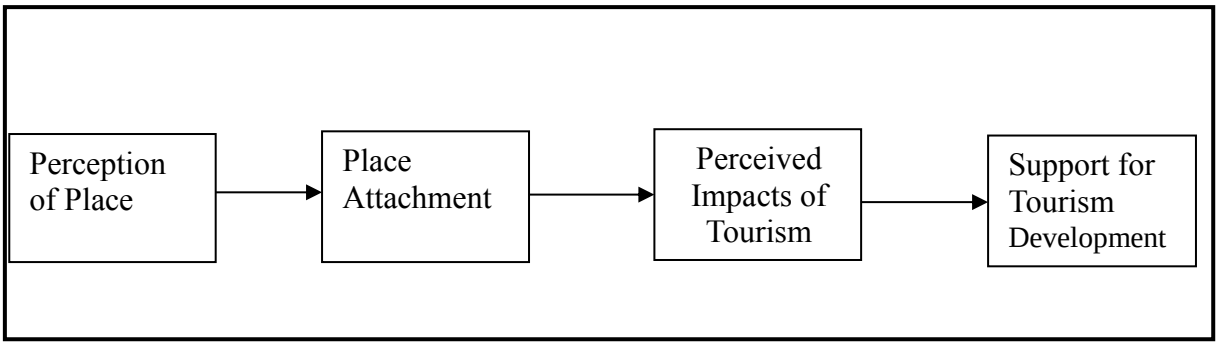


Figure 1c. The second alternative model (M_2)

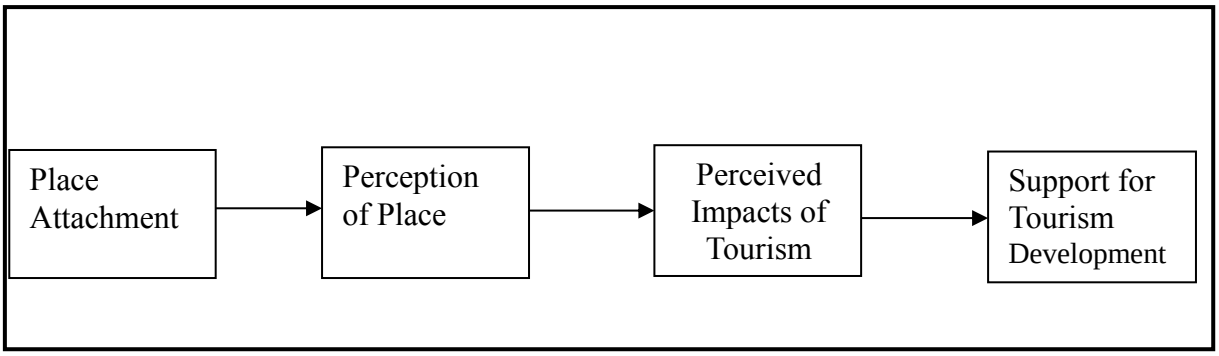
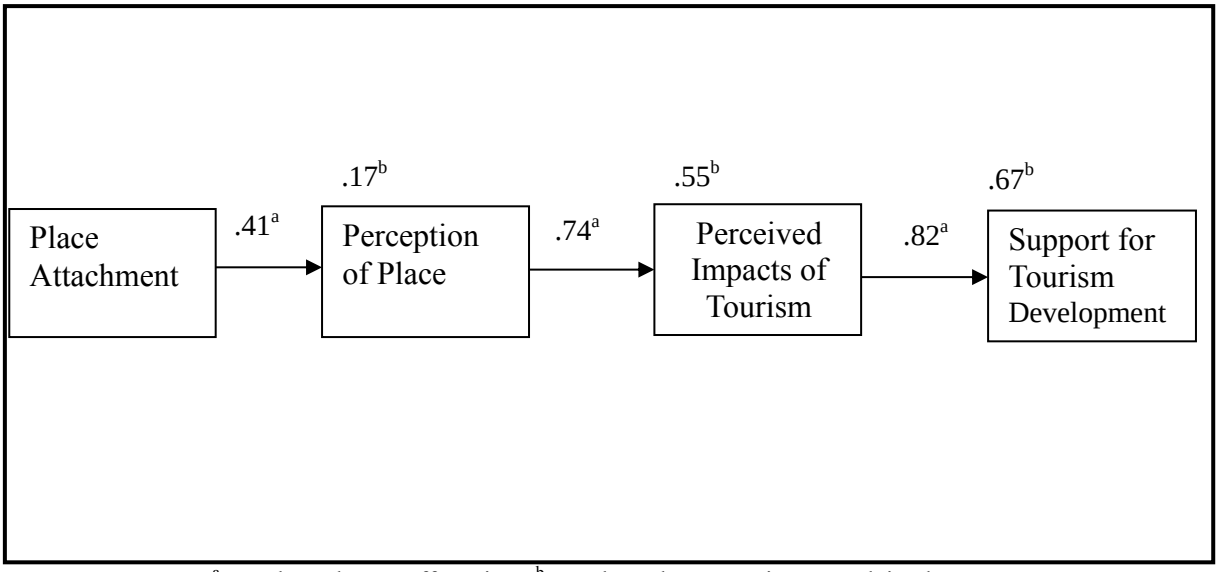


Figure 2. The final path model



[a] Numbers denote effect size; [b] Numbers denote variance explained